



July 22, 2021

**EDP Renewables SH Project GP Ltd.**

219 Dufferin St. Unit 217C  
Toronto, Ontario, M6K 3J1

**RE: Sharp Hills Wind Farm Updates**

Dear Stakeholder,

Thank you for your ongoing interest in the Sharp Hills Wind Farm (the “Project”). In January 2019 EDP Renewables SH Project GP Ltd. (“EDP”) provided Project updates, including further information on the wind farm layout and number of turbines. The Project received an Alberta Utilities Commission (“AUC”) Approval to construct and operate the Project (Approval 24401-D02-2019) on December 20, 2019. The Project was approved using 71 Enercon E-138 EP3 E2 turbines each rated at 4.2 megawatts (MW) and a total generating capacity of 298.2 MW. The AUC approved the Project being built in two phases: Sharp Hills I (59 turbines) and Sharp Hills II (12 turbines).

**Project Update**

EDP is reducing the number of turbines from 71 to 67 for the Project. The four removed turbines are T4, T9, T50 and T61. The locations of the remaining turbines, meteorological towers, access roads, O&M building, substation, and laydown yard have not changed from the previously AUC-approved infrastructure layout. The total Project size is reduced to 297.1 MW. The Project will no longer have two phases and will now be built in one phase.

In addition to a reduction in turbine locations, EDP is changing the turbine model for the Project. The Project will now consist of Vestas V150 turbines with 22 locations rated at 4.3 MW and 45 locations rated at 4.5 MW. All turbines will have a hub height of 105 metres and be installed with serrated trailing edges on each of the blades. The Vestas V150 turbines selected for the Project utilize internal transformers. EDP has completed an updated noise impact assessment for the proposed turbine layout changes. The updated assessment includes sound emissions from nearby energy facilities. The noise results are demonstrated by noise contours in the Project map. The Project will remain compliant with AUC Rule 012: *Noise Control*.

The following table provides a comparison of the permitted Project with the proposed Project changes.

*Table 1: Comparison of the permitted Project and the proposed changes.*

	November 2018 Layout (Permitted)	Proposed 2021 Layout (Proposed)	Changes
<b>Project Generating Capacity</b>	298.2 MW	297.1 MW	Small decrease in capacity
<b>Phases</b>	Two phases for the 71 turbines Phase 1: 59 turbines Phase 2: 12 turbines	One phase for all 67 turbines	Single phase
<b>Number of Turbines</b>	71	67 total 22 @ 4.3 MW 45 @ 4.5 MW	Decrease by 4 turbines
<b>Model</b>	Enercon E-138 4.2 MW	Vestas V150-4.3 MW & V150-4.5 MW	Different turbine technology
<b>Generating Capacity (MW)</b>	4.2 MW	4.3 & 4.5 MW	Increase in turbine capacity
<b>Hub Height</b>	128 m	105 m	Decrease in tower height by 23 m
<b>Rotor Diameter</b>	138.6 m	150 m	Increase in rotor diameter by 11.4 m
<b>Maximum Turbine Sound Output (at wind speeds of 12 m/s)</b>	106 dBA Serrated trailing edge on all blades	4.3 MW – 104.9 dBA 4.5 MW – 105 dBA Serrated trailing edge on all blades	Continued compliance with AUC Rule 012: <i>Noise Control</i>
<b>Transformer Location</b>	Up-tower transformer	Up-tower transformer	No change



Environmental refresh studies have been conducted in Fall 2020 and Spring 2021 and EDP has had correspondence with Alberta Environment and Parks ("AEP") regarding the results.

### **Anticipated Schedule**

Please see the updated Project schedule below. EDP will be completing a submission to the AUC regarding the Project modifications in September 2021.

- July 2021 – Project specific information package mailout and consultation period
- September 2021 – Application to the AUC for Project modifications
- September 2021 – Construction start on approved Project infrastructure
- Q4, 2023 – Commercial operations

Accompanying this letter are four documents that provide more detailed information about the proposed Project modifications and EDP's participant involvement program:

- Updated Project infrastructure and noise map showing the turbine locations, associated Project infrastructure, as well as the dropped turbine locations. The noise impact assessment results are shown on the same map.
- Updated shadow flicker map.
- Updated visual simulations from four (4) locations near the Project.
- Alberta Utilities Commission Brochure, *Public involvement in a proposed utility development*.

We have included four simulations as part of this information package. All updated visual simulations are available on EDP's website at [www.edpr.com/north-america/sharp-hills-wind-farm](http://www.edpr.com/north-america/sharp-hills-wind-farm).

EDP will continue to engage with the community, landowners, local government, and stakeholders over the coming weeks, and we look forward to receiving your feedback about the Project and these proposed changes.

### **Contact Us**

For additional information on the Project, please visit our website at [www.edpr.com/north-america/sharp-hills-wind-farm](http://www.edpr.com/north-america/sharp-hills-wind-farm). If you have questions or comments, please contact us directly at **1-416-479-9736** or [canada.ab@edpr.com](mailto:canada.ab@edpr.com).

Kind regards,

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